

Surveys for Animal Species of Concern in Sage and Grassland Landscapes in Montana

Prepared for:

Montana Department of Fish, Wildlife & Parks
State Wildlife Grants Program
Helena, Montana

Compiled By:

Susan Lenard

Montana Natural Heritage Program
Natural Resource Information System
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SUMMARY

Four projects conducted in grass and sage habitats in eastern Montana in 2003 and 2004 to document the presence of Montana Species of Concern were made possible by a grant from the State Wildlife Grants Program administered by the Montana Department of Fish, Wildlife, and Parks (MTFWP). In addition to target species, all other encountered species of concern were documented during field activity. Project activity occurred from March through October of each year; the timing for each project was appropriate to the breeding season of the species in question, or to a time that was most conducive for assessing targeted species activity.

One-hundred-two bird point counts were conducted in June 2004 to survey for grassland birds on the Gordon Ranch in Blaine County, Montana, an approximately 15,000 acre ranch on which the Montana Department of Fish, Wildlife & Parks holds a conservation easement. Surveys were conducted on pastures of two different grazing regimes; rested and grazed. Of the fifty-two species of birds recorded on the ranch, eleven were state species of concern. Several species of concern were the most abundant of all birds encountered on the property.

Surveys were performed in sixty-two sites in Sheridan, Roosevelt and Daniels counties to document distribution of four species of concern specific to that area of the state. The four targeted species include Yellow Rail (*Coturnicops noveboracensis*), Sedge Wren (*Cistothorus platensis*), Nelson's Sharp-tailed Sparrow (*Ammodramus nelsoni*), and LeConte's Sparrow (*Ammodramus leconteii*). The surveys were conducted between June 2 and July 24 of 2004. The initial surveys occurred early in June, with follow-up surveys to document breeding evidence in mid-to-late July. Three of the targeted species were documented during the survey period. Seventeen additional species of concern in Montana were identified during the surveys: fifteen bird species, one frog and one snake species.

Aerial surveys were conducted in southeastern Montana during 2004 to document black-tailed (*Cynomys ludovicianus*) and white-tailed prairie dog (*Cynomys leucurus*) activity. The study area for this project consisted of three distinct survey locations in the southeastern portion of the state; the primary survey area extended from the Montana/Wyoming

state line north to the Charles M. Russell (CMR) National Wildlife Refuge along the Missouri River, and from the Montana/North Dakota and South Dakota state lines west to the line formed by Highways 87, 19, and 191. The second survey area included land southwest and northwest of Roundup in Yellowstone, Wheatland, Golden Valley, Stillwater, and Musselshell Counties. The third area included portions of Carbon County where white-tailed prairie dogs are known to exist. Nearly 1800 black-tailed prairie dog colonies were recorded during more than one hundred thirty hours of flight time. All were generally located in distinct geographic areas; with approximately half of the colonies less than ten acres in size. New white-tailed prairie dog colonies were identified in southern Carbon County, but on-the-ground verification will be needed to confirm activity.

Surveys were conducted for small mammal species of concern on sage-dominated habitats in Beaverhead, Carbon, Custer, Garfield, Petroleum, Powder River, Powell, Prairie, and Valley counties from June through October of 2003 and 2004. Eight different species of small mammals were caught over the course of 3600 bait-trap and 230 pitfall trap nights. This project was designed specifically to provide information on the distribution of four small mammal state species of concern; Preble's Shrew (*Sorex preblei*), Dwarf Shrew (*Sorex nanus*), Merriam's Shrew (*Sorex merriami*), Great Basin Pocket Mouse (*Perognathus parvus*), and other sagebrush associated small mammals in the state of Montana.

As a small side-project, information on the Blue-gray Gnatcatcher (*Poliophtila caerulea*), a state species of concern, was gathered during 2004 breeding season. This species is rare to the state and of limited distribution; it has been reported from only three locations in Montana (Pryor Mountains, Westby, and the northeast corner of Fort Peck Reservoir) over a total of thirteen separate documented observations (MBD 2005). Limited information is available on nesting events in the state, and as the Heritage program staff was involved in another project in the general area, they took the opportunity to investigate the presence of Blue-gray Gnatcatchers in one of the known areas of occurrence in order to understand their breeding status.